

DRILL STEM TEST

NO.	DATE	FROM	TO	OPEN HOLE	TOOL	CHOKE		WATER CUSHION	TIME TESTED
					SET @	TOP	BOTTOM		
1	9-27-53	9151	9202	Open Hole	9151	1"	5/8"	None	2 Hours.

(Wolfoamp) with 2 packers, Gas to surface 18 minutes, TSTM, Recovered 4170' free oil, 360' oil and gas cut drlg. mud, SFP - 0#, BHFP 300 - 800#, 15 minutes SIP 3375#, HH 4250# in and out.

DEVIATION SURVEY

DEPTH	DEGREES OFF VERTICAL	DEPTH	DEGREES OFF VERTICAL	DEPTH	DEGREES OFF VERTICAL
1000	1/4	8925	1	10640	1-1/4
2100	0	9355	1-1/4	10950	1/4
3575	3/4	9405	3/4	10980	0
4100	1/4	9510	1	11195	1/4
4270	1	9570	1/2	11342	1/2
5180	1/2	9630	1-1/2	11392	3/4
5280	1/4	9889	1	11590	1-1/4
6290	1	10280	2	11740	1
6564	1-1/4	10355	1-1/4	11840	1-1/4
6838	1	10474	1-1/2	12068	2
7574	3/4	10540	1	12630	2

ACIDIZING

11-25-53 Cardinal Acidized Perfs 12490 - 12556 with 500 gallons mud acid / 4500 gallons 20% LST. Time 43 minutes, Injection Rate 3.4 BPM, TP 4100 - 2800 - 2900#, CP:Packer.

11-25-53 Cardinal Acidized Perfs 12358 - 12398 with 500 gallons mud acid / 4500 gallons 20% LST. Time 36 minutes, Inj. Rate 3.6 BPM, TP 3200 - 2900, CP:Packer.

11-25-53 Cardinal Acidized Perfs 12270 - 12294 with 500 gallons mud acid / 4500 gallons 20% LST. Time 31 minutes, Inj. Rate 3.8 BPM, TP 3500 - 2800#, CP:Packer.

11-25-53 Cardinal Acidized Perfs 12195 - 12246 with 500 gallons mud acid / 4500 gallons 20% LST. Time 31 minutes, Inj. Rate 3.8 BPM, TP 3200 - 2800 - 2850#, CP:Pkr.

11-25-53 Cardinal Acidized Perfs 12064 - 12126 with 500 gallons mud acid / 4500 gallons 20% LST. Time 35 minutes, Inj. Rate 3.3 BPM, TP 5000 - 2500#, CP:Packer.

After all acid jobs completed, swabbed and flowed 200 BAW / 140 bbls. drilling mud cut with oil 10 hours. Flowed 480 BLO (all) / 75 BAW / 40 bbls mud 7 hours. 3/4" choke, TP 0 - 600#, CP - 0#, 325 bbls. acid water not recovered.

